

The following listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) An electro-optical liquid-crystal display comprising a layer of liquid-crystal medium between two substrates with organic alignment layers on inside surfaces of each of said substrates;

the liquid-crystal layer having a twist angle, from one substrate to the other, of 110°-360°; the liquid-crystal layer having a surface tilt angle of 2°-20°; and

each of said organic alignment layers having a thickness of 3 nm-150 nm, and

wherein the difference from 1 of the steepness of the electric-optical characteristic line, represented by the formula $V_{90}/V_{10}-1$, is half or less of the corresponding value of an otherwise identical display in which the layer thicknesses of each of the alignment layers is 100 nm.

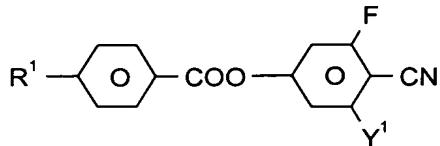
2. (Previously Presented) A display according to claim 1, at least one of said alignment layers has a layer thickness of 4 nm-60 nm.

3. (Cancelled)

4. (Previously Presented) A display according to claim 1, wherein the steepness of the electro-optical characteristic line V_{90}/V_{10} is 1.06 or less.

5. (Previously Presented) A display according to claim 1, wherein the threshold voltage (V_{10}) of the display is 1.20 V or less.

6. (Previously Presented) A display according to claim 1, wherein said liquid-crystal medium comprises one or more compound(s) of formula I



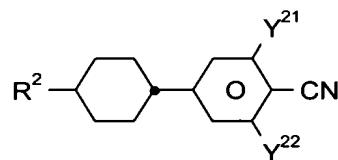
I

wherein

R^1 is alkyl having 1 to 7 carbon atoms, alkoxy having 1 to 7 carbon atoms, alkoxyalkyl having 2 to 7 carbon atoms, alkenyl having 2 to 7 carbon atoms or alkenyloxy having 2 to 7 carbon atoms, and

Y^1 is H or F.

7. (Previously Presented) A display according to claim 1, wherein said liquid crystal medium comprises at least one compound of formula II



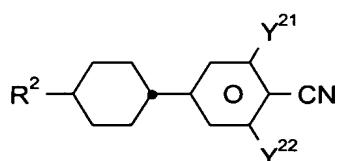
II

wherein

R^2 is alkyl having 1 to 7 carbon atoms, alkoxy having 1 to 7 carbon atoms, alkoxyalkyl having 2 to 7 carbon atoms, alkenyl having 2 to 7 carbon atoms or alkenyloxy having 2 to 7 carbon atoms, and

Y^{21} and Y^{22} are each, independently, H or F.

8. (Previously Presented) A display according to claim 6, wherein said liquid crystal medium comprises at least one compound of formula II



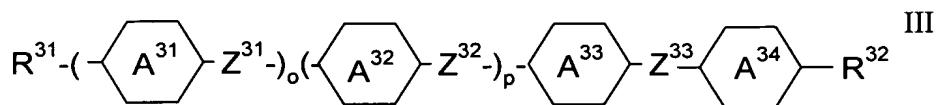
II

wherein

R^2 is alkyl having 1 to 7 carbon atoms, alkoxy having 1 to 7 carbon atoms, alkoxyalkyl having 2 to 7 carbon atoms, alkenyl having 2 to 7 carbon atoms or alkenyloxy having 2 to 7 carbon atoms, and

Y^{21} and Y^{22} are each, independently, H or F.

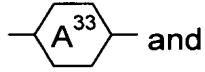
9. (Previously Presented) A display according to claim 6, wherein said liquid crystal medium comprises at least one compound of formula III



wherein

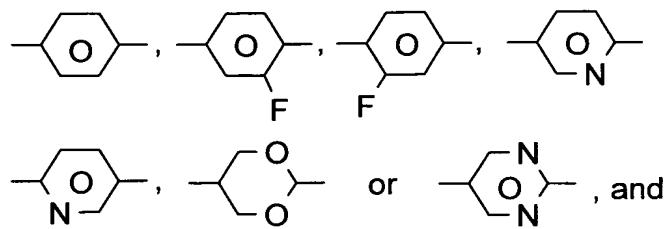
R^{31} and R^{32} are each, independently of one another, alkyl having 1 to 7 carbon atoms, alkoxy having 1 to 7 carbon atoms, alkoxyalkyl, having 2 to 7 carbon atoms, alkenyl having 2 to 7 carbon atoms, or alkenyloxy having 2 to 7 carbon atoms, and

Z^{31} , Z^{32} and Z^{33} are each, independently of one another, $-\text{CH}_2\text{CH}_2-$, $-\text{CH}=\text{CH}-$, $-\text{COO}-$ or a single bond,



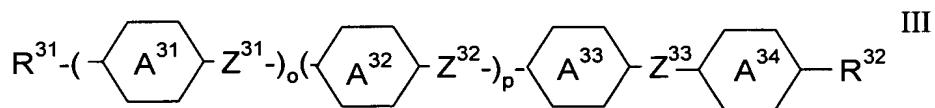
are each, independently of one another,





o and p, independently of one another, are 0 or 1.

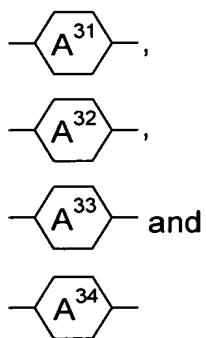
10. (Previously Presented) A display according to claim 7, wherein said liquid crystal medium comprises at least one compound of formula III



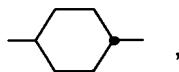
wherein

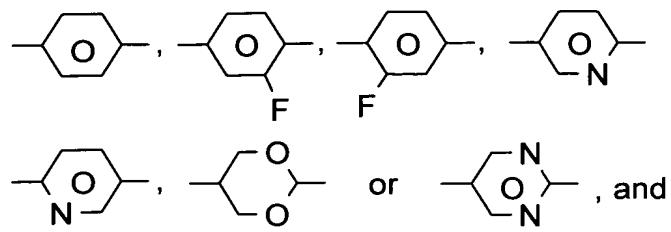
R^{31} and R^{32} are each, independently of one another, alkyl having 1 to 7 carbon atoms, alkoxy having 1 to 7 carbon atoms, alkoxyalkyl, having 2 to 7 carbon atoms, alkenyl having 2 to 7 carbon atoms, or alkenyloxy having 2 to 7 carbon atoms, and

Z^{31} , Z^{32} and Z^{33} are each, independently of one another, $-\text{CH}_2\text{CH}_2-$, $-\text{CH}=\text{CH}-$, $-\text{COO}-$ or a single bond,



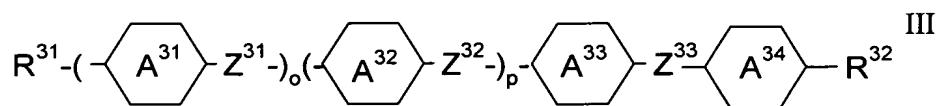
are each, independently of one another,





o and p, independently of one another, are 0 or 1.

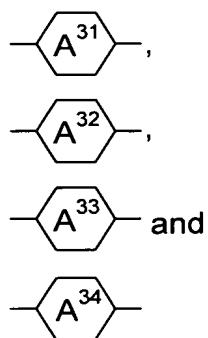
11 (Previously Presented) A display according to claim 8, wherein said liquid crystal medium comprises at least one compound of formula III



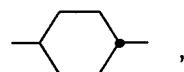
wherein

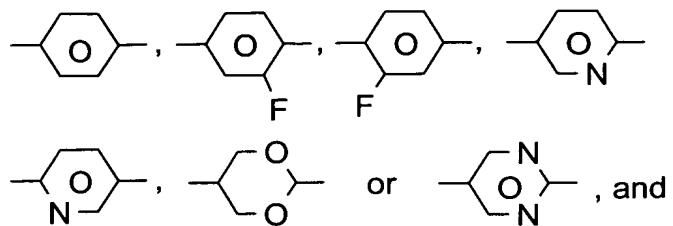
R^{31} and R^{32} are each, independently of one another, alkyl having 1 to 7 carbon atoms, alkoxy having 1 to 7 carbon atoms, alkoxyalkyl, having 2 to 7 carbon atoms, alkenyl having 2 to 7 carbon atoms, or alkenyloxy having 2 to 7 carbon atoms, and

Z^{31} , Z^{32} and Z^{33} are each, independently of one another, $-CH_2CH_2-$, $-CH=CH-$, $-COO-$ or a single bond,



are each, independently of one another,





o and p, independently of one another, are 0 or 1.

12. (Previously Presented) In a method of displaying information using an electro-optical liquid-crystal display, the improvement wherein said display is one in accordance with claim 1.

13. (Previously Presented) A display according to claim 1, wherein said organic alignment layers are a polyamide layer.

14. (Previously Presented) A display according to claim 1, wherein said alignment layers each have a layer thickness of 7 nm-80 nm.

15. (Previously Presented) A display according to claim 1, wherein said alignment layers each have a layer thickness of 8 nm-60 nm.

16. (Previously Presented) A display according to claim 1, wherein said alignment layers each have a layer thickness of 10 nm-25 nm.

17. (Previously Presented) A display according to claim 1, wherein said display has a nematic phase range of at least -20° to 70°, a birefringence of 0.100 to 0.180, a threshold voltage of less than or equal to 1.8 V, and a steepness value of the electro-optical characteristic line of less than or equal to 1.100.

18. (Previously Presented) A display according to claim 1, wherein said alignment layers each have a refractive index of 1.550 to 1.800.

19. (Previously Presented) A display according to claim 1, wherein said liquid-

crystal layer having a surface tilt angle of 3°-15°.

20. (Presently Amended) An electro-optical liquid-crystal display comprising a layer of liquid-crystal medium between two substrates with alignment layers on inside surfaces of each of said substrates; the liquid-crystal layer having a twist angle, from one substrate to the other, of 110°-360°; the liquid-crystal layer having a surface tilt angle of 2°-20°; each of said alignment layers having a thickness of 3 nm-150 nm; and at least one of said alignment layers is an organic layer, and

wherein the difference from 1 of the steepness of the electric-optical characteristic line, represented by the formula $V_{90}/V_{10}-1$, is half or less of the corresponding value of an otherwise identical display in which the layer thicknesses of each of the alignment layers is 100 nm.

21. (Cancelled)

22. (New) A display according to claim 20, at least one of said alignment layers has a layer thickness of 4 nm-60 nm.

23. (New) In a method of displaying information using an electro-optical liquid-crystal display, the improvement wherein said display is one in accordance with claim 20.

24. (New) An electro-optical liquid-crystal display comprising a layer of liquid-crystal medium between two substrates with organic alignment layers on inside surfaces of each of said substrates; the liquid-crystal layer having a twist angle, from one substrate to the other, of 110°-360°; the liquid-crystal layer having a surface tilt angle of 2°-20°; and each of said organic alignment layers having a thickness of 3 nm-150 nm, and at least one of said alignment layers has a layer thickness of 4 nm-60 nm.

25. (Previously Presented) A display according to claim 24, wherein the steepness of the electro-optical characteristic line V_{90}/V_{10} is 1.06 or less.

26. (Previously Presented) A display according to claim 24, wherein the threshold

voltage (V_{10}) of the display is 1.20 V or less.

27. (Previously Presented) A display according to claim 24, wherein said organic alignment layers are a polyamide layer.

28. (Previously Presented) A display according to claim 24, wherein said alignment layers each have a layer thickness of 7 nm-80 nm.

29. (Previously Presented) A display according to claim 24, wherein said alignment layers each have a layer thickness of 8 nm-60 nm.

30. (Previously Presented) A display according to claim 24, wherein said alignment layers each have a layer thickness of 10 nm-25 nm.

31. (Previously Presented) A display according to claim 24, wherein said display has a nematic phase range of at least -20° to 70°, a birefringence of 0.100 to 0.180, a threshold voltage of less than or equal to 1.8 V, and a steepness value of the electro-optical characteristic line of less than or equal to 1.100.

32. (Previously Presented) A display according to claim 24, wherein said alignment layers each have a refractive index of 1.550 to 1.800.

33. (Previously Presented) A display according to claim 24, wherein said liquid-crystal layer having a surface tilt angle of 3°-15°.

34. (Previously Presented) In a method of displaying information using an electro-optical liquid-crystal display, the improvement wherein said display is one in accordance with claim 24.